



LISTING INFORMATION OF  
**Mitek Design No. MCI/WI 90-01**

SPEC ID: 27682

MiTek Canada, Inc.  
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Bradford, ON L3Z 3G7  
Canada

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Design No. MCI/WI 90-01. See design box or print Listing Report.

<b>Attribute</b>	<b>Value</b>
Assemblies	Floor / Ceiling Assemblies
Criteria	UL 263 (2003)
Criteria	CAN / ULC S101
Criteria	UBC 7-1 (1994)
Criteria	CAN / ULC S101 (2004)
Criteria	ASTM E119 (2005a)
Criteria	NFPA 251 (2006)
Criteria	CAN / ULC S101 (2007)
Criteria	ASTM E119 (2010)
Criteria	UL 263 (2011)
CSI Code	06 17 00 Shop-Fabricated Structural Wood
Intertek Services	Certification
Listed or Inspected	LISTED
Listing Section	ROOF/CEILING, FLOOR/CEILING, BEAM & COLUMN ASSEMBLIES
Report Number	3108028/3115131
Spec ID	27682

# DRAWING INDEX

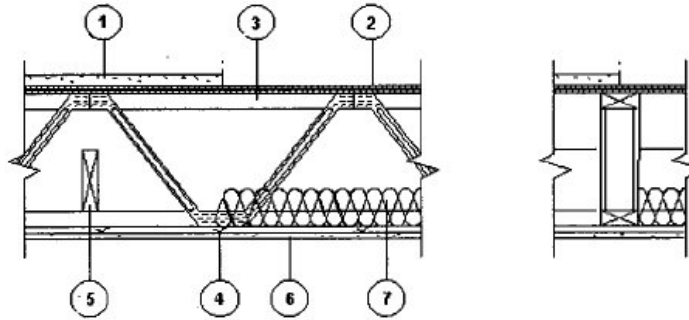
MCI/WI 90-01

# MCI/WI 90-01

Division 06 – Wood, Plastics, and Composites  
 06 17 00 Shop-Fabricated Structural Wood  
 06 17 33 Wood I-Joists

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**MiTek Canada Inc.**  
**Design No. MCI/WI 90-01**  
**Posi-Strut Metal Web System**  
**Floor/Ceiling Assembly**  
**ASTM-E119, CAN/ULC-S101, NFPA-251, UBC-7-1, UL 263**  
**Rating: 1-1/2 Hour – Unrestrained**



Finish Rating: 45 Minutes  
 STC 52 with Insulation & Resilient Channels  
 STC 57 with 1-1/2 in. of Lightweight Concrete

1. **TOPPING (Optional):** Subject to design and project limitations, these systems may be augmented with a lightweight floor topping mix containing perlite or vermiculite aggregate.
2. **FLOORING:** Min. 5/8 in. (15.9mm) plywood or O-2 grade waferboard or strandboard. See below for spacing >16 in. (400mm) on center (oc).

**SUB-FLOORING:** Sub-floor panels to conform to one of the following:

Max. Joists Spacing	Plywood & O-2 Grade Waferboard and Strandboard	Waferboard and Strandboard R-1 & O-1 Grade
16 in. (400mm)	5/8 in. (15.9mm)	5/8 in. (15.9mm)
19.2 in. (500mm)	3/4 in. (19.0mm)	3/4 in. (19.0mm)
24 in. (600mm)	3/4 in. (19.0mm)	3/4 in. (19.0mm)

**SUB-FLOORING FASTENING:** Min. length of fastener for sheathing and subfloor attachment for thickness from 5/8 in. (15.9mm) to 3/4 in. (19.0mm) thick is:

A. Common or Spiral Nail – 2 in. (51mm) (Canada); 8d (0.131 in. dia. x 2.5 in. long) (US).

B. Ring Thread Nail – 1-3/4 in. (45mm) (Canada); 6d (0.120 in. dia. x 2 in. long) (US).

Nail spacing shall be 6 in. (150mm) oc along butt edges of panel and 12 in. (300mm) (Canada) and 10 in. (US) oc along intermediate support.

3. **CERTIFIED MANUFACTURER:** MiTek Canada Inc.

**CERTIFIED PRODUCT:** MiTek Posi-Strut System

Listed fire designs are based on systems designed for structural and functional performance in accordance with MiTek Canada Inc. procedures. All designs are tested in unrestrained configuration. The chord materials are structural rated lumber material as graded under NLGA-1993

Date Revised: April 20, 2016  
 Project No. 3115131



**MCI/WI 90-01 (2 of 2)**

Division 06 – Wood, Plastics, and Composites  
 06 17 00 Shop-Fabricated Structural Wood  
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Standard Grading rules for Canadian Lumber or graded by an inspection bureau or agency approved by the United States Department of Commerce Board of Review of the American Lumber Standards Committee with chord sizes of 3 x 2, 4 x 2, 5 x 2.

**CERTIFIED MODELS:** MiTek Posi-Strut Series: Includes PS-10, PS-10V2, PS-12, PS-12V2, PS-12i, PS-13, PS-14, PS-14V3, PS-16, PS-16V3 metal webs having a min. depth of 9-1/4 in. and spaced up to a max. of 24 in. oc for floor/ceiling systems.

MiTek Canada Inc. Posi-Strut metal web system with structural graded chords as per NLGA grading rules. All Posi-Struts are to be designed and sealed by a Professional Engineer.

**4. FURRING CHANNELS (Optional)**

**5. BRIDGING/STRONGBACK:** 2 x 6 SPF #2 to be screwed to the bottom chord with two 3 in. screws and to be spaced at 7 ft. oc.

**6. GYPSUM BOARD:** Two layers of 5/8 in. Type X thick gypsum wallboard. Base layer to be installed with long dimensions perpendicular to supports with end joints butted over supports and staggered 24 in. min. 1-1/4 in. Type W screws are spaced 12 in. oc on intermediate supports and 6 in. oc on supports at butt joints. Face layer installed with long dimension perpendicular to supports and edges staggered 24 in. from base layer end joints. 2-1/4 in. Type W screws are placed min. 12 in. oc on intermediate supports and 8 in. oc on end supports at butt joints. To fasten face layer to base layer, a row of Type G screws is located 6 in. away from end joints, spaced 8 in. oc.

**7. INSULATION (Optional):** Where design requires insulation, it shall be 1-1/2 in. (38mm) thick mineral wool insulation batts. Where insulation is optional, it may be 3-1/2 in. (89mm) thick fiberglass insulation batts with density 0.75 lb/cu.ft. All batts are to be placed between bottom joist flanges and supported by metal furring channels. All butt joints shall be over furring channels.

**8. SUSPENDED CEILING SYSTEM (Optional, Not Shown):** Any suspended ceiling system may be selected which satisfies the following criteria:

- A. It must be a fire rated system, and be installed within the terms of its listing.
- B. In lieu of a finish rating, any suspended ceiling design may be used that is part of a listed assembly, utilizing a wood deck and wood framing, that has a fire resistance rating equal to or greater than the rating assigned to the MiTek Canada, Inc. assembly.
- C. It must be suspended in accordance with the terms of its listing and a min. of 7-1/2 in. below the joist.
- D. Penetrations such as ducts, air diffusers, and fixtures must be protected in such a manner as to conform to the terms of the listing of the suspended ceiling system.

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